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(57) Abstract: The disclosure provides methods of propagating skeletal muscle cell (SkMC) cultures enriched in differentiation-competent myoblasts that express normal levels of CD56 and reduced levels of desmin. The methods comprise culturing SkMCs in a mitogen-rich cell culture medium supplemented with TGF- $\beta$ . The disclosure also provides therapeutic methods utilizing SkMCs propagated in TGF- $\beta$ , e.g., methods of treating myocardial infarction by transplantation of autologous or allogeneic SkMCs.



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